

# Seattle Permits

— part of a multi-departmental City of Seattle series on getting a permit

## Building Permit Requirements for Prefabricated Metal Buildings

Updated November 14, 2005

The purpose of this Client Assistance Memo (CAM) is to provide the architect, engineer, building manufacturer, building supplier, contractor and plans examiner with information and guidance about the special submittal requirements for metal buildings, including those having more than one design engineer.

All plans must conform to the requirements of the Seattle Building Code (SBC) for the type of project being submitted. The code requires that all plan documents be a minimum size of 18" x 18" and must be of such quality as to be legible after microfilming (see CAM 106, *General Standards for Plans and Drawings*, for general specifications on plans submittal, available at [www.seattle.gov/dpd/cams](http://www.seattle.gov/dpd/cams)). All required information must be shown on the design drawings and will not be acceptable if found only in the calculations.

Steel buildings are required to be designed by a licensed structural engineer, except that a civil engineer licensed in Washington may design one-story, light-framed metal buildings that are not unusually complex and do not have precast cladding (SBC 106.5.2.2, exception 4). When more than one engineer is involved with the design of the building, including its foundation, the foundation designer must be licensed by the state of Washington and will be designated the structural engineer of record.

### Submittal Requirements

The following list contains items that must be included on the metal building design drawings (see SBC 106 and Chapter 16 for complete submittal requirements).

1. Seal and signature of the engineer (SBC 106.5.2.2) on each sheet of plans.

- The structural engineer of record's stamp "approved for design concept" must be on each sheet of the design drawings that do not show the seal of the engineer of record.
2. Name and address of steel fabrication plant.
    - Special inspections are required for fabricated structural load-bearing members and assemblies fabricated on the premises of a fabricator's shop (SBC 1704.2).
    - Welding done in an approved fabricator's shop, i.e., AISC-certified or equivalent, does not require special inspection (SBC 1704.3, exception 3).
    - Special inspections are not required when the steel fabricator is registered as an approved fabricator with the City (SBC 1704.2.1, see the exception).
  3. Structural notes including but not limited to:
    - All imposed design loads, both dead and live, including equipment loads (See SBC 106.5.2.6).
    - Seismic design data including seismic importance factor,  $S_s$  and  $S_1$  values, spectral response coefficients  $S_{DS}$  and  $S_{D1}$ , seismic design category, seismic force resisting system, and design base shear, response modification factor used (R), and analysis procedure used (SBC 1603.1.5).
    - Wind design data including basic wind speed, wind importance factor, wind exposure, internal pressure coefficient, components and cladding, and analysis procedure used (SBC 1603.1.4).
    - ASTM number, yield stress, and allowable stress of all structural steel members.
    - All loads imposed on the foundation, both vertical and lateral.
    - Notation indicating all welding performed by welders qualified in accordance to AWS standards and all welds conformed to AISC standards (SBC 2204.1).
    - All codes followed (2003 SBC, etc.)



4. Plan documents (SBC 106.5.2.4), including but not limited to:

- Framing plans
- Cross sections
- Wall sections
- Floor and roof details
- Connections of structural members
- Types of construction materials

The permit submittal package shall also include complete calculations (SBC 106.5.2.1).

This CAM is designed to assist you in preparing for your plan submission and is not intended to be a complete listing of all requirements. Please be sure to reference CAM 106 and meet all of the Seattle building codes that apply to your project.

## Questions?

If you have questions about building permit requirements for metal buildings, please call DPD's Building Code Technical Support Line at (206) 684-4630, available Monday–Friday, 1:00 p.m.–4:15 p.m. Or visit the Applicant Services Center, (206) 684-8850, Monday, Wednesday, and Friday, 7:30 a.m.–5:30 p.m., and Tuesday and Thursday, 10:30 a.m.–4:30 p.m.

## Access to Information

Links to electronic versions of DPD publications are available on the "Publications" page of our website at **[www.seattle.gov/dpd](http://www.seattle.gov/dpd)**. Paper copies are available from our Public Resource Center, located on the 20th floor of Seattle Municipal Tower at 700 Fifth Ave. in downtown Seattle, (206) 684-8467.